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MEMORIAL

OF THE CITIZENS OF CINCINNATI,

TO THE CONGRESS OF THE UNITED STATES,

RELATIVE TO THE NAVIGATION

OF THE OHIO AND MISSISSIPPI RIVERS.

MAR 16 1927
UNIVERSITY OF MICH

Cincinnati:
PRINTED AT THE DAILY ATLAS OFFICE,
THIRD STREET, OPPOSITE THE POST OFFICE.
1814.

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1844.

Transportation
Library

At a meeting of the Committee of the Citizens of Cincinnati, held on the 22nd January, 1844, it was

Resolved, That a new edition of the Memorial of last year, with such additions as subsequent information and experience may have rendered advisable, be prepared forthwith, and transmitted to Congress.

JAMES HALL, *Chairman.*

HENRY HAYES, *Secretary.*

Transport.

370-25-3 RP

WESTERN NAVIGATION.

A meeting of the citizens of Cincinnati, for the purpose of Memorializing Congress on the subject of removing the obstructions from the Western Waters, was held at the Council Chamber on Friday evening, Nov. 4th, 1842,

MICAJAH T. WILLIAMS, Esq, Chairman,
JOSEPH GRAHAM, Secretary.

On motion of James Hall, Esq., the following gentlemen were appointed a Committee to draft a Memorial to Congress:

James Hall, T. J. Halderman, E. S. Haines, Paul Anderson, E. D. Mansfield, J. C. Vaughan, J. G. Woodin, Lewis Whiteman, S. W. Hartshorne, P. Rogers, George Carlisle, Robert Buchanan, Joseph Pierce, Sen., Jedediah Banks, Henry Hayes, M. T. Williams and George Graham, Jr.

Resolved, That the same Committee be authorized to correspond with any Committees that may be appointed at other places in the West, in reference to the improvement of the Ohio and Mississippi Rivers, with a view to procure a concert of action among the friends of the measure; and also to correspond with members of Congress and other influential persons, whose cooperation may be desirable or necessary, and that the said Committee be fully authorized to adopt all measures, which, in their opinion, may be expedient, for the promotion of the important object of the meeting.

Resolved, That the said Committee be authorized to call an adjourned meeting of the citizens, for the purpose of reporting said Memorial when ready for signatures.

M. T. WILLIAMS, *Chairman.*
JOSEPH GRAHAM, *Secretary.*

At a meeting of the citizens of Cincinnati, held 21st December, 1842, LEWIS WHITEMAN, Esq., was appointed Chairman, and HENRY HAYES, Secretary.

Judge Hall, from the Committee appointed on the 4th ult., reported the draft of a Memorial to Congress, on the subject of the Navigation of the Ohio and Mississippi Rivers, whereupon the following resolutions were unanimously adopted :—

Resolved, That the Memorial just read be adopted ; that it be signed by the Committee which reported it, printed, and transmitted to Congress through our immediate Representatives in that body.

Resolved, That copies of the Memorial be transmitted to the several State Legislatures now in session, by the same Committee, with a view to procure the sanction of those bodies to the views expressed therein.

LEWIS WHITEMAN, *Chairman.*

HENRY HAYES, *Secretary.*

MEMORIAL.

To the Senate and House of Representatives of the United States, in Congress assembled, the Memorial of the people of Cincinnati, in the state of Ohio, represents as follows:

Your Memorialists, in common with all the inhabitants of the Western and South Western States are deeply interested in the trade and navigation of the Ohio and Mississippi Rivers. Inhabiting a country of great magnitude, and unsurpassed fertility, rich in all the products of nature, and of unbounded resources, our commerce, already great, is daily swelling in value and importance. The plain of the Mississippi extending from the 29th to the 47th degree of North Latitude, embraces not only all the productions of the temperate zone, but many of those of the frigid regions of the North, and of the sunny climate of the tropic; so that those who inhabit the shores of this gigantic River and its tributaries, carry on already an interchange of domestic products and manufactures, which in itself constitutes a most extensive traffic, and includes a great variety of the staples of commerce. But when to this is added all that we export to foreign markets, and import for home consumption, the variety and value of this immense internal trade, will be found to assume an importance which should recommend it to the serious attention of the American people, and the National government.

In estimating the importance of the Navigation of the Ohio and Mississippi Rivers, it is necessary to invite attention to a few prominent facts, which we shall collect from the most authentic sources. The region drained by those rivers and their tributaries, extends from the 29th to the 47th degree of North Latitude,

and from the Allegheny to the Rocky Mountains; and the portion of that territory already inhabited, and organized under civil government, may be stated, with sufficient accuracy, in round numbers, as embracing an average length from North to South of 12 degrees, and a breadth of 10 degrees, which would give an area of 432,000 square miles. And it is worthy of remark, that such is the wonderful fertility of this country, its mineral wealth, its abundant resources, and its advantages of climate and navigation, and so great are the enterprise of its people, and the increase of population from abroad, that any rational statement of its limits or its wealth, founded upon evidence, must fall far short of the truth. It is a new country imbued with all the characteristics of a vigorous youth, and possessing extraordinary elements of expansion and improvement. Every day is extending its limits, filling up its vacant places, and developing its latent resources, and not a season passes which does not open some new channel of commerce, or some hidden source of wealth. Everything is growing and changing, ripening and increasing; and any collection of statistics, in regard to such a country, must fall short of the reality, because our data must be taken from the records of the past, and we must lose the accumulations which are rapidly growing up around us.

The region in question is no less than the Great West, a wilderness fifty years ago, but now an important integral portion of a great nation. It contains nine States and two Territories, and parts of two other States. The aggregate population of all the States and Territories bordering on the navigation of the Ohio and Mississippi, is 8,437,779; or, if we include only one third of the population of Pennsylvania and Virginia, for the portion residing west of the Allegheny Mountains, we have an aggregate of 6,461,892, which is a little over one third of the population of the United States. We approach the Congress of the United States, then, with a claim in which, under the most narrow view of the subject, one third of the American people are obviously and directly interested, and in which a majority of the population of the Union are interested, if we include the whole of the inhabitants of the States which border on those rivers. But we hold this to be a very inadequate view of the question

of interest; for such is the magnitude of our trade, and the intimacy of our relations with the Atlantic States, that there is scarcely a corner of the Union which is not bound to us, by a constant and reciprocal interchange of commercial advantages. Three of the Atlantic States, have been engaged for years, in rival exertions to secure the advantages of the Western trade, and have expended millions of treasure in the endeavor to attract that trade to their respective seaports. Another great State has recently embarked in the same patriotic contest, with a spirit which shows how high an estimate is placed upon the prize. Which of these States is not directly interested, in the transportation of merchandise throughout the whole length of our Western Rivers? Which of them can view with indifference a question that involves the facility, the safety, and the cheapness of navigation, upon these great channels of commerce? After constructing by the most lavish expenditure, rail-roads, turnpikes, and canals, leading to the West, does their pecuniary interest cease, and their patriotism die, at the termini of their gigantic works, and have they no further concern in the merchandise, or the passenger, which has passed their boundaries? These questions are easily answered. Those who purchase our products are interested in every tax upon our industry, and they who supply us with foreign merchandise or manufactured articles that we consume, are concerned in all the facilities for transportation, by which their market is rendered accessible. Whatever affects the cost of freight and insurance, concerns all mutually, who participate in the interchange of commodities.

Of the millions of property floating annually upon the western waters, much is owned directly by citizens of the Atlantic States, and of the hundreds of thousands of passengers who crowd our steamboats, a vast number are inhabitants of those States, who are drawn hither by business, by curiosity, in the pursuit of pleasure, or in the search of a new home. The subject, then, is not one of local concern, or sectional character; and in asking Congress to expend a liberal portion of the public treasure, in removing the obstructions from our great Western highways, we believe that we represent the wants and interests not merely of eleven States and two Territories, but of *the American people.*

We invite the patronage of the nation, to a great central chain of National inter-communication, which pervades nearly the whole Union, having its connections with the Ocean through Boston, New York, Philadelphia, Baltimore and New Orleans, and extending its advantages westwardly, throughout the wilderness, to the extreme frontier.

Every tax upon the products of the country must be paid either by the producer or the consumer, or it must be divided between them, and whatever adds to the cost of our imports, it is so much taken in some shape from the pockets of the seller or buyer. Where these burthens are of such a character as to afford employment to a portion of our population, it is some consolation to know that what is taken from one class is given to another; but such is not the form of the tax upon our commerce which forms the subject of this memorial. We deplore the loss, the utter annihilation of property. We deprecate the existence of obstructions in our navigation, which cause unnecessary expense by delay, by destruction of property, by risk, and consequent precaution. All that is thus taken, is so much wrested from the hand of industry and enterprise, and given to the devouring element. It is lost to the country. Individuals suffer more or less, but no one is a gainer. The destructive hurricane purifies the atmosphere, and the carcasses that moulder on the battle-field enrich the soil, but the wealth engulphed in the bosom of the waters yields no fruit, nor does the corpse of the hapless voyager mouldering in an obscure grave, on the borders of a western river, add a flower to the wilderness.

The length of the rivers which we propose to have improved at the National charge, is worthy of consideration. Without burthening this Memorial with unnecessary details, upon a subject of general notoriety, we may state in round numbers, that the length of the Ohio, from Pittsburgh to its mouth is 1000 miles, and that the length of the Mississippi from the Falls of St. Anthony to the Ocean is 2000 miles, giving an extent o 3000 miles for the principal rivers, the improvement of which w ask, by the general government. But in showing the Nation character of this navigation, and its importance in compariso

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were now on Lake Erie alone 64 steamboats. After going to some extent in these statistical details, Mr. Giddings to give Southern gentlemen a more adequate conception of what the Western commerce really was, went on to state that in 1842 the State of Ohio alone had built vessels of a larger aggregate amount of tonnage than Virginia, South Carolina, Georgia, Alabama, Florida, Louisiana, and Mississippi, with Missouri, Arkansas, and Tennessee in the bargain. Was a navigation like this entitled to no regard, no protection at the hands of Government? Including ships, brigs, and craft of all descriptions, there were 400 vessels now navigating these lakes above the Falls of Niagara. The first steamboat built at Chicago was in 1832; and in eleven years the tonnage of that port had grown up to 117,000 tons.

"On a lake coast exceeding five thousand miles there had been bestowed by the Government but $2,400,000, (while in Delaware harbor alone it had spent $300,000.) Of this coast two hundred and forty miles belonged to the State of Ohio, and it had received but $423,000. Lake Erie had no natural harbor on all its southern coast, insomuch that Perry's fleet had to lie for protection under some little islands near the head of the lake. The mouths of the rivers were open in the spring, but as soon as the freshets subsided, the strength of the stream was no longer sufficient to force its way into the lake; the consequence of which was, that by mid summer a bar of sand was deposited all across the mouth of the harbor, so that a man might walk across dry-shod. When a good harbor had been made by projecting parallel piers into the lake, as at Cleveland, vessels of six or seven hundred tons could enter at all times without the least difficulty.

"Mr. Giddings here went on to enumerate the harbors where improvements of this kind had been made or commenced, but all abandoned in 1838, in consequence of which all that had been done went to ruin, and some of the harbors were entirely closed. From 1825 to 1838, these improvements were made the care of the Government, and appropriations were from time to time made and economically applied. The people were satisfied and grateful; but in 1838 the very tools necessary to preserve what had been done were publicly sold; the Government expressly recommending that these works be abandoned. The people then learned what they had to expect."

The Buffalo Commercial Advertiser furnishes the very interesting statistics below; showing the amount of Merchandize and Furniture which passed that great Key of the Lakes, in the past year. Ohio, Indiana, and Illinois all receive goods through other routes. Michigan receives hers almost exclusively through Lake Erie.

The Tolls show conclusively that the stream of Emigration is to Wisconsin; but that Ohio is the great consumer of merchandize:

"The quantity of merchandize and furniture arriving here and passing westward is one of the best criterions of the growth and prosperity of the interior. In connection with our table of Canal Exports, we gave the aggregate of merchandize received. The ultimate destination of this property and the families accompanying it, exhibits fully the leading points of emigration during the past season.

"Of the merchandize Ohio has received much the greatest quantity; while the heaviest aggregate of Furniture has gone toward Wisconsin. The annexed Table shows this:

Exhibit of Mdze. and Furniture passing Westward in 1843.

	Mdze., lbs.	Furniture, lbs.
Ohio,	29,056,865	1,384,372
Michigan,	16,505,281	1,492,627
Illinois,	6,954,903	1,275,377
Wisconsin,	5,730,523	2,630,190
Indiana,	4,511,301	249,936
Pennsylvania,	152,023	51,664

The exports of wheat and flour, from four ports upon the lakes, viz: Cleveland, Detroit, Sandusky and Chicago, in 1843, amounted to the following aggregate: Wheat 1,894,992 bushels, and Flour 812,903, worth about *four and a half millions* of dollars.

The value of all the exports from Cleveland alone, for the year 1843, was *five and a half millions.*

The states immediately adjacent to these lakes, and directly interested in their navigation are New York, Pennsylvania, Ohio, Illinois, Indiana, and Michigan, all of which have been enumerated in a foregoing part of this memorial, as being directly interested in the navigation of the western rivers, except New York and Michigan. These two states contained together, in 1840, a populatiou of 2,641,188, which added to that of the states whose borders are washed by the Mississippi and its tributaries, gives a total of 11,078,967, and shews the important fact that *eleven* out of the *seventeen* millions of the population of the United States are directly interested in these two great links of the vast interior chain of communication.

Nor is this the only form in which we recognise the intimate

connection of these parts. If we take our position at the busy harbor of Buffalo, and behold her quays crowded with merchandize and passengers; if we extend our observation along the great railway and canal to Albany; and thence by the Hudson to New York, and the railway to Boston, we behold an inland thoroughfare of unrivalled extent and magnificence, created by a vast expenditure of treasure, and an unsurpassed exertion of genius, enterprise, and public spirit; and we see this long line of transit crowded with a busy throng of human beings, and rich freights of merchandize. To what end were millions of dollars expended in the construction of these highways, and why are they thus frequented by busy thousands of human beings? It is the road to the West; those countless tons of freight are the products of our rich plains, or the returns of foreign merchandize which are destined to traverse our lakes and rivers. It is a part of that great inland trade, which has grown up within the memory of living men, and has become the pride of our country, its paramount interest, the muscle and sinew of its power.

We cannot separate these interests. It is impossible to consider these great arterial channels, without perceiving their connection with each other, and tracing their ramification to the utmost extremities of our country. The West is no longer a frontier; it is the heart of the Union. This is not only geographically true, but it is true in every sense. The centre of population, of production, and of consumption, is here. We furnish the greater portion of the exports and consume the greater portion of the imports, that make up the sum of the foreign commerce of the nation. Our rivers are no longer margined by silent forests; cities, towns, villages, and cultivated fields, enliven their shores, and bear testimony to the industry, resources, and refinement of the country.

We have said that the Ohio and Mississippi are but parts of a great chain of inland communication. Their tributaries penetrate every Western State, and disseminate throughout the whole of our broad plain, the advantages of this navigation, and should Congress carry forward, with the spirit worthy of a great nation, the work of improving the Mississippi and Ohio, it will not be

long before every river in the West will be cleared of obstructions, by the action of the general or state governments—and the magnificent spectacle will be presented to the world of an uninterrupted inland navigation of *more than twenty thousand* miles in extent, within the bosom of a great continent, far removed from the sea coast, and independent of the estuaries and inlets of the ocean!

Nor is the conception of this great highway complete, until we trace it to its extremities. In the south it connects with the Gulph of Mexico in latitude 29, in the north it falls into the St. Lawrence, communicates with the whole southern boundary of the Canadas, and stretches off into the Atlantic ocean in latitude 50; and it extends through Lake Superior, through a long chain of Lakes and Rivers, far beyond the utmost bounds of civilization in the North West. On the East it connects itself by canals and rail-roads, already mentioned, with the sea ports of the eastern and middle states, while on the West, its advantages are extended by the long channels of the Mississippi, the Missouri, the Arkansas and Red River, beyond the inhabited regions of the United States. From large portions of our country, it is the highway that must be traveled to Texas, to Oregon, and to Canada; it bears the freights intended for our commerce with Santa Fe, the products of the fur trade from the regions of the Rocky Mountains, and the traffic with all the Indian tribes upon our borders. Such is the character and magnitude, of the grand thoroughfare, which we ask the nation to open and improve by its treasure, and such the trade for which we invoke the parental care of the government.

The number of steamboats employed at this time in navigating the Mississippi and its tributaries, is 450. The average burthen of these boats is 200 tons each, making an aggregate of 90,000 tons, and their aggregate value at $80 per ton, is $7,200,000. Many of these are fine vessels, affording the most elegant accommodations for passengers, and which will compare favorably, in beauty of model, completeness of finish, and all other particulars, with the best packets in any part of the world.

The number of persons engaged in navigating our steam-

boats, varies from twenty to fifty for each boat. The average is about thirty-five persons, which will give a total of 15,750 persons embarked in this navigation.

It appears from the Reports of the Louisville and Portland Canal, that more than 700 Flatboats have passed that canal in one year. At this rate there cannot be less than 4,000 descending the Mississippi, and allowing five men to each boat, there are 20,000 persons engaged in this branch of the navigation. The cost of these boats is $420,000, which, as they do not return, is an annual expense, and the expense of loading, navigating and unloading them is $960,000, making the whole annual expenditure upon this class of boats $1,380,000.

In 1834, the number of steamboats in existence, on the Western Waters, was 230, and they were estimated to carry 39,000 tons. The expense of running them was put down as follows :—

60 boats, over 200 tons, 180 running days, at $140 per day,	$1,512,000
70 boats, from 120 to 200 tons, 240 running days, at $90 per day,	1,512,000
100 boats, under 120 tons, 270 running days, at $60 per day,	1,620,000
Total yearly expenses,	$4,645,000

This calculation, applied to the present number of boats, would result as follows :—

110 boats, over 200 tons, 180 running days, at $140 per day,	$2,772,000
140 boats, from 120 to 200 tons, 240 running days, at $90 per day,	3,024,000
200 boats, under 120 tons, 280 running days, at $60 per day,	3,240,000
Total,	$9,036,000

This sum may be reduced to the different items producing it, in the following proportions :—

For Wages, 36 per cent., equal to	$3,252,960
For Wood, 30 per cent., equal to	2,710,800
For Provisions, 18 per cent., equal to	1,626,480
For Contingencies, 16 per cent., equal to	1,445,760
Total,	$9,036,000

To this is to be added, for Insurance, 15 per cent., on $7,200,000,	$1,080,000
Tolls of the Louisville and Portland Canal,	250,000
Interest on the investment $7,200,000, at 6 per cent.	432,000
Wear and tear of the boats, 20 per cent.,	1,440,000
Total,	$12,238,000
Add for the Flatboats, as above,	1,380,000
Total annual cost of transportation,	$13,618,000

The rapid increase of this commerce may be seen from the following facts :—

Previous to the adoption of the steamboat navigation, say in 1817, the whole commerce, from New Orleans to the upper country, was carried in about twenty barges, averaging 100 tons each, and making but one trip per year. The number of keel-boats employed on the Upper Ohio, could not have exceeded 150, carrying 30 tons each, and making the trip from Pittsburgh to Louisville and back in two months, or about three voyages in the season. The tonnage of all the boats ascending the Ohio and Lower Mississippi, was then about 6,500.

In 1834, the number of steamboats was 230, and the tonnage equal to about 39,000 tons; and in 1832, the number of boats is 450, and their burthen 90,000 tons.

In 1832, it was calculated that the whole number of persons deriving subsistence from this navigation, including the crews of steam and flat boats, mechanics and laborers employed in building and repairing boats, wood cutters, and persons employed in furnishing, supplying, loading and unloading these boats, was 90,000. As the number of boats has doubled since that time, the number of people directly engaged in and about this navigation is not less than 180,000; but who shall place a limit to the numbers who are beneficially interested, in a business which distributes its millions of dollars for wood, its millions for wages, its millions for provisions, its millions for machinery and the labor of mechanics, and which transports a commerce whose value can only be computed by hundreds of millions?

The whole number of steamboats constructed at Cincinnati in 1843, was 45; the aggregate amount of their tonnage is 12,035

tons, and their cost $705,000; which gives an average of 267 tons for each boat, and about $16,000 for the cost of each.

The models of these boats, as well as their finish and accommodations, evince a progressive improvement upon the boats of former years. They have more length and less draught, and are faster than the last generation, while the hulls are more staunch, though they contain less weight of timber. The cabins are not so gaudy and expensive as those of the old boats, while they are greatly superior in comfort and convenience. The average cost is about seventy-two dollars per ton, which is a great reduction from former prices.

All the work of these boats is done at Cincinnati, and gives employment to Boat builders, Carpenters, Joiners, Engine makers, Blacksmiths, Coppersmiths, Painters, Upholsterers, Cabinet makers, Chairmakers, and some other mechanics.

There have been steadily employed at the Cincinnati Ship Yards, during the year, in the heavier portions of the work :—

320 Hands at the Boat Yards,
200 Joiners,
200 Engine and Foundery-men,
50 Painters,

770

Within the same year, there have been built at Louisville, New Albany and Jeffersonville, 35 boats, of 7,406 tons, which cost $700,000. These boats would cost $20,000 each, would average 211 tons, and would cost about $95 per ton.

And there have been built at Pittsburgh, in the same year, 25 boats, of 4347 tons, of which the cost is not given. The average tonnage of the boats is about 173 tons.

The aggregate of the boats built in 1843, is nearly as follows :—

	BOATS.	TONS.
Cincinnati,	45	12,035
Louisville, New Albany & Jeffersonville,	35	7,406
Pittsburgh,	25	4,347
Add for all other places,	15	3,000
		26,788

The whole tonnage of the Western boats previous to 1843, being 90,000 tons, and the annual loss by destruction and superannuation being 20 per cent., the decrease by the latter cause for 1843, was 18,000 tons, and the increase 26,788 tons, making a net increase of 8,788 tons.

It will be seen, that we have placed the tonnage of our Western boats, at 90,000 tons. This was considered to be the real aggregate of the tonnage, when the first edition of this Memorial was prepared, in the winter of 1842 and '43. We have, since that time had access to official returns, published under the sanction of Congress, shewing the tonnage of the West to have been much larger, even at that time, than we stated it to be; but as we had based all our calculations on the amount stated by us, we have not, in this edition, altered the statement alluded to, but shall add such additional information as we have obtained.

By the official returns, it appears that the whole Steamboat tonnage of the United States, on the last day of September, 1842, was 218,994 tons; which may be divided as follows, setting down the figures as we find them in the returns, and only transposing them so as to arrange them under the appropriate heads :—

West.	Tons.
New Orleans,	80,993
St. Louis,	14,725
Cincinnati,	12,025
Pittsburgh,	10,107
Louisville,	4,618
Nashville,	3,810
	126,278

North West.	Tons.
Buffalo,	8,212
Detroit,	3,296
Presque Isle,	2,315
Oswego,	1,970
Cuyahoga,	1,859
	17,652

Other.	Tons.
New York,	35,260
Baltimore,	7,143
Mobile,	6,982
Philadelphia,	4,578
Charleston,	3,289
Newbern,	2,854
Perth Amboy,	2,606
Apalachicola,	1,418
Boston,	1,362
Norfolk,	1,395
Wilmington,	1,212
Georgetown,	1,178
Newark,	1,120
Miscellaneous,	4,767
	76,064

The Steamboat tonnage belongs to the internal commerce of this country, as we have no steam vessels engaged in foreign commerce, except two or three in the Gulph of Mexico. Of the whole 218,994 tons, it appears that *two-thirds* belong to the West; and as a portion of the other tonnage is employed on routes leading to the West, and connecting with our highways,

the commerce of the West may be safely stated as amounting to *more* than *two-thirds* of the commerce of the Union.

Estimating the number of steamboats from their average tonnage, there must be *one thousand* in the United States, of which *six hundred* belong to the West.

The table of tonnage above given, shows where this vast commercial marine is employed. First, on the Valley of the Mississippi: next in the city of New York, and then on the Lakes. From the port of New York there are some 70 or 80 steamboats constantly running; while on the Lakes there are hundreds. In the Valley of the Mississippi the number of steamboats now employed is equal to the whole number of those employed in England proper. This will appear from the following statement extracted from McCullough's Gazetteer of the steamboat tonnage of Great Britain in 1834:—

	Steam Ships.	*Tonnage.*
England,	434	43,877
Scotland,	105	13,113
Ireland,	84	17,674
British dependences,	49	8,032
Total,	722	82,716

It appears then, that the steamboat tonnage of the Mississippi Valley exceeds by 40,000 tons, the entire steamboat tonnage of the British Empire. In other words, the steamboat tonnage of Great Britain is only two-thirds that of the Mississippi Valley. The magnitude of this fact will be best seen by considering that the entire tonnage of the United States is but two-thirds that of Great Britain; showing that this proportion is exactly reversed in western steamboat trade.

Not only is the building of steamboats increasing every year, but every year is opening new channels of trade and navigation. In the last year the river Platte was navigated by a steamboat for the first time, and it will not be long before the Yellow Stone, the Arkansas, Red River, and the Missouri, will employ more boats than are now floating on the Mississippi.

In estimating the value of the property floating upon the Ohio and Mississippi, at one time, or within any given period, much

must be left to conjecture, as under our happy form of government no portion of it is subject to entry at a custom-house, or liable to any official registry, which would place on record the accurate statistics of this commerce. But we are not left entirely without data, from which to form an estimate approximating the true amount. We know that this trade is carried on by means of 450 steamboats, of 90,000 tons burthen, some of which, as the larger boats running to New Orleans, from the more distant ports, make from eight to fifteen trips per year; the boats carrying the vast trade from Pittsburgh, Cincinnati, and Louisville, to and from St. Louis, make thirty trips, while a great number of boats ply between less distant points, and make their trips more frequently. If, however, we suppose that the average number of trips is twenty, our whole number of boats have the capacity to carry 1,800,000 tons per annum. To this would be added the freights of 4,000 Flatboats, carrying, at an average of 75 tons each, 300,000 tons, and bringing the whole annual tonnage to more than Two Millions, if the steamboats always carried full cargoes, which, however, is far from being the case. But the fact that our boats are capable of carrying that amount of freights, and that they find sufficient business to keep them employed, forms an important link in the series of facts, from which we form our estimate.

The actual amount of imports into New Orleans, by the descending trade of the Mississippi, is another important element in this calculation. This we obtain from a list published annually in that city, and obtained from the daily reports of the Wharf Masters, of the packages and merchandize actually landed. Taking the year from September 1, 1841, to August 31, 1842, estimating the supposed contents of the packages of which the contents are not actually stated or known, and affixing the present reduced prices, we find that the imports, as stated in this list, amount to $35,764,477 36.

Another mode of deciding the amount of this trade, is by reference to the number of sea vessels arriving at the port of New Orleans, which may be ascertained from the reports of the Custom-house. These are not at this moment within the reach of your Memorialists, but can be commanded by Congress. But

we state on the authority of the newspapers of that city, that the shipping in port at one time, in December 1843, amounted to upwards of 600—all of which are employed in carrying away the staples of the West, while their crews consume a large amount of products, not included in the list of staples. The country which employs 600 ships in bearing off its products, by one outlet, while it exports largely in the opposite direction, by the Lakes, Canals, and Rail Roads, can be neither small in extent, nor inconsiderable in its wealth, industry, and resources.

This list, it will be perceived, includes only the more important articles of commerce; but those which are not embraced in it, would amount to a very considerable annual sum. It does not include live stock; yet horses, cattle, sheep, and hogs are shipped to New Orleans in immense numbers; and the amount of poultry, eggs,* vegetables, and other provisions, carried to that market, from the most distant parts of the Mississippi Valley, is great beyond the belief of those not conversant with the facts. New Orleans, it will be recollected, is situated in a Southern climate, and in a planting country, where but a scanty supply of food is raised for home consumption, and it is a seaport at which the number of vessels congregated at the business season, is greater perhaps than at any port in the Union, to say nothing of the large number of Steamboats, and other river craft; and the supplies of provisions for that city, and for the shipping and boats lying there, are floated down the Mississippi. A variety of manufactured articles also, such as machinery, furniture, and many fabrics of iron, tin, copper, wood, and leather, are not included in the list referred to. Cincinnati alone manufactures sugar-mills for the Southern market, to the amount of $200,000 per annum, a considerable portion of which are shipped to New Orleans. Nor does that list include any merchandize or produce which is landed without the limits of the Municipalities, which would include the cargoes of many steamboats, and a still larger portion of the lading of flatboats. Neither does it include shipments of specie, nor the money car-

* It is a fact that one individual at Cincinnati has negociated drafts through the Banks to the annual amount of from $20,000 to $25,000, for the proceeds of eggs shipped from that place to New Orleans.

ried in various forms on board of steamboats. We arrive then at the conclusion, that the whole annual value of the arrivals at New Orleans by the river, from descending boats, is not less than fifty millions. After making this estimate, we were gratified to learn from an authentic source, that an intelligent committee of gentlemen at New Orleans, making an estimate recently, from the same data, arrived at the same conclusion.

To this is to be added the trade to that part of the Mississippi, called "the Coast." The shores of the Mississippi, on both sides, from the mouth of the Ohio downwards, receive supplies of live stock, provisions, machinery, farming implements, cabinet ware, tin ware, saddlery, and a great variety of fabrics, from the more northern States. The population thus supplied, is not less than one million of souls, who receive all the luxuries, and most of the necessaries of life, by way of these rivers.

A still more important addition, is the trade which passes from town to town, and from State to State, throughout the West, and which is independent of what are termed exports or imports. It is difficult to form any adequate idea of this trade, but we who see it going forward, and witness the gigantic means required to keep it in operation, know that it forms a large item in the estimate of our trade and industry. The population of the Western plain was nearly seven millions at the enumeration made in 1839 and '40, for the Census of 1840, and the trade to which we now allude, is that of an enterprising people, whose numbers may now be assumed as fully seven millions, scattered over a continuous but vast region, embracing a great diversity of soil, climate and products, and affording the materials and facilities for an almost unlimited interchange of commodities. The furs and lead of the Northern portion, the iron of Pennsylvania, Ohio, Kentucky, and Tennessee, the grain, the salted provisions and live stock of the Middle region, and the sugar, cotton, and tobacco of the South, would alone furnish the elements of a vast internal commerce.

The manufactured articles consumed in the West, are now made, to a great extent, within our limits, and transported to every part of our country, and of course the raw materials which are employed in these fabrics, enter largely into our

freights. At Cincinnati alone, by an accurate enumeration made for the year 1841, it appears that there were 10,647 workmen engaged in mechanical and manufacturing employments, and that the annual value of their products was $17,432,670
And the amount of provisions, in addition to those included in the above estimate, passing through our city from the interior, was computed at 6,000,000

Making, $22,432,670

After deducting the consumption of our city, and the articles which are shipped to New Orleans, there will remain something over $10,000,000 of manufactured articles which are transported to various markets within the Western States, and nearly all of which float on our rivers.

The manufactures of Pittsburgh, do not vary greatly in amount from those of Cincinnati, but in the $17,000,000 set down for Cincinnati, are included five millions of provisions and other articles which find a market at New Orleans, and which are included in the estimate of the imports to that city, while the labor and capital of Pittsburgh are more largely invested in fabrics of iron, glass, &c., which are distributed widely throughout the west. The shipments, therefore, from both places, to other parts of the West, may be safely stated at twenty-five millions. Louisville and New Albany would furnish five millions more to this head; and if three points on the Ohio furnish thirty millions of articles to the trade within the Western States, it cannot be an unreasonable calculation to allow, for the raw materials imported into those places, and for the whole of this branch of trade carried on between all other places in the West, including St. Louis, forty millions more, making for the whole of this interior interchange of commodities an aggregate of seventy millions of dollars, which added to the fifty millions exported through New Orleans, would give a grand total of one hundred and twenty millions, for the annual amount of the productions of the Western States, which are freighted upon the Ohio and Mississippi. This calculation we find corroborated by that of an intelligent committee at St. Louis, which is the more satisfactory, as the vastness of the commerce

centering at that point, and the great extent of country through which the operations of her enterprising citizens are carried, affords them the best data from which to form a deliberate opinion.

To the above amount is to be added the value of the imports of Foreign Goods, which are floated to their places of destination upon the same waters. And here it may be stated with sufficient accuracy for the present purpose, that if our exports to New Orleans amount to fifty millions of dollars, our returns from the same point will equal that sum, while the imports from the eastern cities, by the way of Wheeling, Pittsburgh, and the Lakes, embracing a large proportion of all the European goods used in the West, will amount to an additional sum of fifty millions per annum, making in all one hundred millions of imports.

In making these estimates, we feel satisfied, that if the statistics of our trade could be ascertained, they would greatly exceed our estimate, and that we may safely assume the aggregate value of the property floating on our great rivers, to be two hundred and twenty millions per annum.

The imports into the United States from Foreign Nations, for the year 1841, were $127,916,177, and the exports $121,851,803, and when it is recollected that in estimating our interior trade we have based some of our heaviest items upon data collected three years ago, that all our values are calculated at prices greatly reduced, and that our whole country, with its trade and production, are in a state of rapid progression, it will be readily seen that this interior commerce is fully equal to our commerce with foreign nations, that its character is equally National, and its protection equally essential to the common benefit and advantage of all the States.

It is also true, that of the foreign goods imported into the United States, the West is the most important consumer, and that besides our direct contribution to the National revenue in the cash paid for lands, we pay a large proportion of the imposts on foreign merchandize; and that we furnish a larger proportion of the public revenue than any other part of the Union, while the proportion of the National expenditures made among us has been comparatively trifling.

We do not make this comparison invidiously, but in vindication of our just rights. We have seen the treasures of the American people lavished in bountiful appropriations, for surveys and defences of the coast, for the improvement of the harbors, for the erection of light-houses, for the building of Custom-houses, for astronomical observations, and various other purposes, in aid of the Navigation and Commerce of the Ocean, not only without regret, but with a willingness to contribute freely to whatever may conduce to the general prosperity. But while sustaining our just proportion of the expenditures for commercial purposes, upon one boundary of the Union, and for the benefit of one branch of the National wealth and enterprise, we claim the appropriation of a like proportion of the public treasure, for the protection of another branch of commerce, equally National, and alike important. We claim it as the equitable right of a numerous population, who have built up a great internal empire by their own wealth and labors, with little aid from the common purse, who defended it during the perils of the war with their blood, and are daily enlarging its boundaries and resources by their industry, their patriotism, and their public spirit. We urge it, as the true policy of a wise people, in reference to their own future prosperity. The West is the centre of the Union, the citadel of its power, the great living fountain, whose boundless resources are destined to sustain and enrich the Nation. Here will soon exist the millions who will govern our vast Republic, and the treasures resulting from the labors of an energetic people, which must circulate through every channel of commerce and industry, to the remotest boundaries of our dominion, and to every land to which the American flag shall find access; and here should the Nation lay broad and strong the foundations of its future greatness.

We may fairly refer to the prospective increase of this trade, as it is obvious that it must not only be great, but beyond the compass of any reasonable calculation. The vast amount of unsettled land of the finest quality, and the tide of emigration which is rapidly pouring in, leave no room to question the speedy growth of the country, or to doubt that its agricultural products will be multiplied in an increasing ratio.

Another great interest is growing up among us, which will vastly accelerate this process. Already we manufacture largely. Pittsburgh and Cincinnati, to say nothing of other points, stand prominent among the manufacturing towns of the Union; and nature has scattered over our land with a profuse munificence, all the elementary principles and materials required for the sustenance of manufacturing industry. The most important of minerals, iron, is found in Tennessee, Kentucky and Ohio, and doubtless may be found in other places, of the most superior quality, and admirably adapted to every purpose for which that metal is used. Lead is equally abundant. Cotton, hemp, and wool, are among our staples. The country abounds in water power. The cotton of Mississippi can be delivered at Cincinnati nearly as cheaply as at New Orleans, and there is no place in the Union where the laborer can be supported with greater comfort and economy. The pittance which elsewhere will barely procure the necessaries of life, will here spread his table with its luxuries. With beef and pork at 2 cents per pound, wheat at 70 cents per bushel, corn at 12½ cents per bushel, potatoes at 25 cents per bushel, turkeys at 25 cents, chickens at 8 cents, coal of the finest quality at from 6 to 10 cents per bushel, and wood at $1.50 per cord, we must take this branch of industry from any country having a more sterile and less genial climate. The raw material, the motive power, the provisions, are here; the market for the manufactured article is here; and the labor will come, whenever we say that we are ready to give it employment.

We cannot forbear from quoting some valuable facts, which are contained in a late number of Hunt's Magazine, in which the writer shews the immense amount of the agricultural products of the United States—of which the West is known to furnish the greatest proportion:—

"Of the amount of the several species of agricultural products yielded by the country, we are furnished with full data by the statistical returns, which although perhaps not entirely accurate, present as complete a statement as could under the circumstances, have been furnished. By a table compiled from these returns, it appears that we have produced during the year

ending the 1st of June, 1840, the products, a statement of which we here subjoin, with their amount."

LIVE STOCK.	
Horses and mules,	4,333,669
Neat cattle,	14,871,596
Sheep,	19,311,374
Swine,	26,301,293
Poultry of all kinds, estimated value,	$9,344,410
CEREAL GRAINS.	
No. bushels Wheat,	84,823,272
" Barley,	4,161,504
" Oats,	123,071,341
" Rye,	18,645,567
" Buckwheat,	7,291,743
" Indian Corn,	377,531,875
VARIOUS CROPS.	
No. pounds Wool,	35,802,114
" Hops,	1,238,502
" Wax,	628,303
Bushels Potatoes,	108,298,060
Tons Hay,	10,248,108
Tons Hemp and Flax,	95,251
TOBACCO, COTTON, SUGAR, &c.	
Pounds Tobacco gathered,	217,163,319
" Rice,	80,841,422
" Cotton gathered,	790,479,205
" Silk Cocoons,	61,552
" Sugar made,	155,100,809
Cords Wood sold,	5,088,891
Value of the produce of the Dairy,	$33,787,008
" " Orchard,	7,556,904
Gallons Wine made,	124,734
Value of home made or family goods,	$29,023,380

He also states as a fact which has escaped the observation of many, that the Indian corn raised in Tennessee is nearly three times the amount raised in Pennsylvania, and more than four times the quantity produced in the great State of New York, and yet Tennessee, in the north, is hardly looked upon as an agricultural State.

Tables are given which shew that two-thirds of the crop of Indian corn is raised in the slave-holding States—and of this quantity but a very small portion is exported. It is the great staple for the food of all classes—and for beast as well as man. In these States, a comparatively small amount of wheat is raised though the crops of oats are large. The great wheat growing

States are Ohio, Pennsylvania, New York and Virginia, though it is known they have been greatly gained on the past two years by Illinois and Michigan.

The great corn growing States are Tennessee, Kentucky, Virginia, Ohio, Indiana, North Carolina, Illinois, Alabama, Georgia, Tennessee being the greatest. In 1839, she raised 44,986,000 bushels. Tennessee therefore is the banner State in corn, Ohio in wheat, and New York in oats; while in the aggregate of these three principal grains, Ohio is the banner State of the Union—Pennsylvania rating No. 5 in the list. New England stands very low in the scale, in both corn and wheat, and not very high up in oats. Massachusetts and Connecticut are both below Delaware in their product of wheat and corn.

The crops of 1842 are estimated at 800,000,000 bushels, the whole of which in price would average about the average selling price of corn, or 40 cents per bushel; which gives the enormous aggregate of $320,000,000, as the worth of the present year's grain crops, exclusive of rye, buckwheat and barley —which, according to the same calculation, is worth about $16,000,000 more, giving a grand total of $336,000,000!! This is indeed a great country, and in nothing greater than its agricultural resources, which, are but partially enumerated above, and which, too, have hardly begun to develope themselves."

If there is any truth in figures, we have here abundant evidence, that agriculture is the paramount interest of the country, the source of its commerce, the fountain of its wealth. The West is by far the most extensive, fertile, and productive part of the Union and furnishes the most valuable portion of these products; the vast amount of which corroborate the estimate we have made of the value of our trade. And we add, the further inference; if the products of the nation be so great, how important the great central avenues by which they must find a market!

If the Western rivers are thus important to the American people, in reference to the facilities afforded to them in their commerce and private concerns, as individuals, it is not less so to them in their political capacity. Of the amount of population which we have set down as inhabiting the countries watered by these rivers, 4,053,731 are inhabitants of the States containing the public domain, and in which the Nation is directly interested as the owner of the soil. How many of those inhabitants would now be settled upon lands purchased

of the government, had not the country been made accessible by the application of steam? The reply is obvious. Of all the elements of the prosperity of the West—of all the causes of its rapid increase in population, its growth in wealth, resources, and improvement, its immense commerce, and gigantic energies, the most efficient has been the navigation by steam. Had it not been for the widely diffused facilities of commerce, afforded by the Mississippi and its numerous tributaries, ages would have rolled away before the great wilderness of the West would have been penetrated by the foot of industry; and had not the noble conception of Fulton, carried out by the skill of the American Mechanic, and the energy of the Western people, brought the steamboat into successful operation, the productions of these rich plains must have continued to be floated laboriously to market by the insufficient means of the barge, the keel, and the flatboat, while our imports would have come to us burthened with a cost of freightage which would have limited the amount to an inconsiderable traffic; and the commerce of the Nation, with its resources derived from imports, would have been proportionably depressed. The sales of public land would have been comparatively small, and the millions which have enriched the public treasury from this source, would not have existed, as a branch of the National income. Without the navigation by steam, it is not probable that the proceeds from this source, would have exceeded the cost of the purchase and sale of the public lands, with the contingent expenses of protecting, surveying, and bringing them into market. The government is still the largest proprietor of the soil of the Western States, and is the party most largely concerned in interest, in every improvement which developes the resources, stimulates the industry, or enhances the value of land, in this region. Can it be doubted that an improvement in the navigation of our rivers, which would disarm it of its dangers, and decrease its expenses, would not produce those beneficent effects, or that the government would not be the greatest gainer from an expenditure which would increase her revenue from Foreign imports, enhance the value of the public domain, and enlarge the Federal population?

The amount of the lands owned by the government, within

the States and Territories, exceeds 300,000,000 of acres, and that owned west of the Mississippi and Arkansas, exceeds 750,000,000. One thousand millions of acres constitute the vast domain, penetrated and intersected by our great rivers, rendered accessible by our 600 steamboats, and made valuable by the industry of our seven millions of inhabitants.

The value of the public lands sold, and paid for, in the eight years, from 1834 to 1841, inclusive, was $73,832,008 47, and deducting the sales in Michigan, Alabama, and Florida, which do not lie in contact with the waters proposed to be improved, the amount of sales in the States directly interested is $55,940,569 09. Nearly fifty-six millions of dollars then, have been drawn from these States within eight years, a portion of which has gone to the support of the General Government, and the remainder distributed *pro rata* among all the States of the Union. If the western people pay annually to the Nation a revenue of seven millions of dollars, for the purchase of the lands they occupy, what proportion of that sum should be appropriated by the Government, in its capacity of *a land owner* only, for the keeping up the highways which render those lands accessible, and give them the greater part of their value? And what proportion should it appropriate as the proprietor of the countless millions of acres yet unsold, the value of which is daily enhanced, and indeed their entire marketable value almost wholly created, by the industry of the western people? If we should succeed in demonstrating the necessity of improving this navigation, or the expediency of the measure as a question of interest, can there be a doubt, that the Government, as the largest proprietor of the soil, should bear her just proportion of the expense?

But the Nation has another important interest in this improvement. The Report of the Postmaster General, dated December 2, 1841, shows that the mail is transported within the Western States, by Railroad and by Steamboat, 587,309 miles, of which the portion carried by Railroads is not specified, but is too inconsiderable to be worthy of deduction. Large as this number of miles may seem, it is small compared with the extent to which the transportation of the mails by water, might

be carried, if our navigable rivers were so improved as to afford water for the passage of boats uninterruptedly during the dry season. The rapidity, safety, and cheapness of this mode of transportation, recommend it so strongly, as to leave little doubt of its adoption, wherever the navigation is such as to render it practicable; nor can there be a rational question, in our opinion, as to the duty of Congress, in reference to the improvement of those great arterial highways, through which the mails must flow, under any complete and thoroughly efficient administration of the Post-office Department.

Nor is this the only department of the government, which is interested. A line of military posts extending along the whole western frontier, from the Southern to the Northern limits of the United States, derive all their supplies of ordnance, small arms, military stores and provisions, by means of these rivers, which also afford the facilities for the transportation of troops. In the eager competition among the numerous places in the West, whose citizens are applicants for the site of the proposed Western Armory, the relative accessibility of these points by the larger navigable rivers, is dwelt upon as a prominent topic, showing distinctly the sense of the community, on this subject. We have not the data at hand, to show the amount of property, and the number of lives, annually embarked in this navigation, by our government, but there is no question that the stake is large, and the cost of transportation great; for although provisions, and some other articles, are delivered by the contractors, at their own risk, at the places of consumption, the cost and risk of transportation, form parts of the prices, and are actually paid by the Government.

In case of a war, by which our coasts or borders should be assailed in any direction, the importance of this navigation, to the public, would be vastly increased. If the coasting trade should be rendered unsafe, a large amount of the commerce between the States which now floats upon the Atlantic, would necessarily be thrown upon the interior channels of communication, and would pass along our great rivers, which would become, if such is not now their character, the great central highways of the Nation. As the rivers in question, occupy a central

position, in reference to the whole Union, and are now connected with all its extremities, either by their own tributaries, or the noble works constructed by the States, they would become the principal ways by which troops and munitions of war, would be transported to the points of danger; and not only the safety of the navigation, but the completeness and celerity of the access from point to point, would become eminently important to the Nation. During the last war, New Orleans was defended in part by gallant volunteers from the interior, and that city would have fallen but for the timely arrival of arms from Pittsburgh. And in any future war, the Western plain must be the centre and main body, upon which the Nation must rely for support, and from which men, and arms, and provisions, must be drawn, to sustain either extremity of the Union which may be threatened from abroad.

But even now, the Mississippi is the great arterial highway for the transit of passengers between the extreme points of the Union. At this time the actual cost of a passage from Philadelphia to New Orleans, upon the mail route, by the railways and roads along the Atlantic sea board, is, for a single passenger $94, while the expenses of a single passenger, between the same places, by the route of the western rivers is but $36. If the great western route, impeded as it now is, by obstructions in the navigation, burthened with tolls, and taxed by exorbitant rates of insurance, is the cheapest channel of intercourse, between the north and south, by more than one half, can it be doubted that it will become the chief thoroughfare when it shall have received the improvements of which it is susceptible? Setting aside then, the safety and advantage of the greater portion of the American people, which we think the government ought not to disregard, these rivers claim the attention of the National Legislature, as affording the most important link in the chain of post routes, and the most useful military highway within the bounds of the Union.

The importance of this navigation, and of its improvement, has not been overlooked by the States, which are most immediately interested. On the 27th January, 1817, a resolution was passed by the Legislature of Ohio, inviting the co-operation

of Virginia, Pennsylvania, Kentucky and Indiana, in measures for the improvement of the Ohio river. The invitation was promptly responded to by Virginia, Pennsylvania, and Kentucky; and in 1819 a thorough examination of that river was made by Gen. Blackburn of Virginia, Gen. John Adair of Kentucky, Gen. E. W. Tupper of Ohio and Walter Lowrie, Esq., of Pennsylvania, who made a joint report to their respective Legislatures, under date of November 2, 1819, accompanied by elaborate drafts and plots. It is believed that the several Western States have caused surveys to be made of many of the rivers within their boundaries; Ohio has improved the Muskingum, and Kentucky is now engaged in making slack water navigation upon Green river, Kentucky river, and Licking; Indiana and Illinois contemplated the improvement of the Wabash, and caused surveys to be made for that purpose, and the attention of the General Government has been urgently called to the Upper and Lower Rapids of the Mississippi.

If it be asked, why the improvement of the Ohio and Mississippi, has not been undertaken by the States whose borders are washed by these streams, it might be inquired in return, why a few States, of which these rivers form the boundaries, should assume a work of such magnitude, and of so obviously a national character. As well might the States on the sea board, be required to erect light houses, and to improve the harbors of the seacoast, as the Western States be left to open the navigation of those great rivers, which separate States, that are declared by the supreme law of the Union to be public highways for all the States, and upon which no single State nor combination of States, can place an obstruction, or collect a toll. Being public highways for all the States, and not lying within the territory or civil jurisdiction of any one member of the confederacy, the navigation belongs to the whole American people, and is a proper subject of National legislation.

But there are obvious difficulties in the way of any joint or several action by the States, in relation to this work. If undertaken by the States singly, it would be difficult to assign the limits within which the labor of each should be expended; if by all jointly, the diversity of population, wealth and interest,

would embarrass and probably defeat any attempt to apportion the expenditure. Popular opinion would vary as to the time, the manner, and the magnitude of the disbursement—and while all the States would be equally able or willing—or that the unanimous action of their Legislative bodies could be obtained.

The financial resources of the Western States are limited, and have already been taxed to the full extent of their ability. Populating with unexampled rapidity, and spread over a vast surface, their unavoidable expenses have been great, and their exigences suddenly created. In older communities public improvements have grown up imperceptibly with the increase of population, wealth, and refinement; but here, an energetic and civilized population, accumulating rapidly in a wilderness, were obliged to create the institutions, the public works, the facilities for intercourse and civil government, to which they had been accustomed. Within fifty years we have created and reared up, civil institutions and monuments of public spirit and social enterprise, which in other countries have been the work of centuries. We have organized Cities, Counties and States; we have made Roads, Canals, and Railways; we have built Court Houses, Jails, Schools, and Churches; we have covered a wilderness with productive farms, and flourishing villages. All this has been done by a people, who brought little wealth into the country, from the products of a virgin soil, and the labors of an enterprising population. The State of Ohio and its citizens have nearly completed 765 miles of Canal, and artificial slack water navigation, at a cost when all the payments shall have been made, of 9½ millions of dollars, and 667 miles of Turnpike road, at a cost of 4 millions of dollars, besides about 70 miles of Railroad. The expenditures of Kentucky upon Turnpike roads, and slack water navigation, have been very large; while Indiana and Illinois have expended millions of dollars in attempts and preparations to extend great systems of artificial communication throughout their widely spread territories.

And we respectfully suggest further, that it is essential to a successful prosecution of this great work, that shall be carried on, not only with the treasure of the Nation, but under the direct supervision of government officers. The magnitude of the

undertaking, and the wide extent of territory through which it must be conducted, requires that there should be unity in the plan, skill in the execution, and rigid economy in the expenditures, to give it the full efficiency of which it is susceptible. The government has the command, in its able corps of Engineers, of all the talent, experience, and scientific knowledge, requisite for the work, together with the possession of able reports and estimates, already made, in relation it is believed, to every branch of the desired improvements; and in the known fidelity and efficiency of these officers, the public would have a pledge that the expenditures would be made under a well matured system, and with reference to public utility, instead of being prostituted to sectional partialities, or private speculations.

We are gratified to perceive that our views in regard to the agency by which this great work shall be effected, are in accordance with those of the General Government, and that an experienced officer, who has the confidence of the country, has been entrusted with the execution of the preliminary surveys. We hail this measure as an earnest that something is to be done, and that it will be done under right auspices. We ask nothing but what is practicable, and reasonable,—nothing but what will be honorable to the country and permanently useful to the people; and as we desire that every dollar which may be appropriated to a purpose so truly national and so nobly munificent, shall be faithfully applied, we hope to see this work entrusted only to the most responsible hands, and conducted with the most rigid economy. And we feel relieved in regard to the duty of furnishing the statistics requisite to sustain our petition, by the knowledge, that several Engineers of great ability have been employed industriously during the past season in making surveys; and by the belief, that their reports will furnish all the information desirable, and in a far more perfect form than we could give to it.

The obstructions in these rivers consists of rocks, bars, and sunken logs or snags. There are a few points on the Ohio river, where rapids are created by ledges of rock; the most important of these are at Captina and Buffington's Island, and Le Tart's Falls, the Falls of Ohio, and the Grand Chain;

and there are points where the navigation is not safe for as much water as is contained in the channel, in consequence of the existence of projecting rocks. The removal of rocks, and the improvement of all the rapids, except the Falls of Ohio, could be easily accomplished. With regard to these rapids, and to the whole subject of the obstacles in the upper portion of the Ohio, we beg leave to refer to an able report made in 1835, by Lieut. G. Dutton, of the U. S. Engineers, which will be found on file in the War Department.

The most important obstruction in the navigation of the Western rivers, occurs at the Falls of the Ohio, which is too well known to require description. A fall of 25 feet in two miles, caused by a ledge of rocks extending across the river, renders this obstacle impassable for steamboats, except during the high floods which occur usually in the spring, and continue for a few days only at a time. These rapids were formerly avoided by a laborious and expensive portage, extending from Louisville to Shippingsport, a distance of 2½ miles; but they are now passed by means of a Canal. This work which was intended as a facility to our commerce, and a benefit to the whole people of the West, has signally failed in accomplishing the purpose for which it was constructed; and as the government of the United States, with the beneficent view of patronising a work of public utility, became a partner in this Canal, it cannot be thought invidious to call the attention of Congress to its deficiencies. The objections to this work are :

1. The contracted size of the locks, which do not admit the passage of the largest class of boats.

2. The insufficiency of the construction of the Canal, which being deficient in width and depth, causes great delay, and often serious injury, to passing boats.

3. The enormous and unreasonable tax levied in tolls.

With regard to the first objection, we remark, that the Louisville and Portland Canal was intended to be a National work, and stands connected with the commerce of the whole West. During the greater part of the year it affords the only outlet for the productions of the larger portion of the Ohio Valley, and the only channel of ingress for the valuable imports of the same

region. Such a work should have been constructed upon the most liberal scale, and its benefits have been extended to every class of the community. This is unfortunately not its character. After many years' experience, in the navigation of our rivers by steamboats, it has been ascertained that boats of a great length are those of the greatest speed, and best suited to the navigation of our rivers, and the character of our trade. But the length which has been found most convenient, is greater than the dimensions of the locks of this Canal; and thus the boats which are best adapted to the trade between Pittsburgh, Cincinnati, and other ports on the upper Ohio, and St. Louis or New Orleans, are excluded from that commerce, and a smaller class of boats, which are much less profitable, is exclusively employed.

The second objection is one of not less forcible application to a work of this magnitude. The width of this canal is such, that steamboats cannot pass each other, within it, nor can a loaded boat work her way through but by a protracted and laborious operation. As two boats passing in opposite directions cannot enter the canal at the same time, the delays encountered here are very great, and add materially to the heavy tax paid more directly in the form of toll, while the scanty dimensions of the channel both in width and depth, exposes boats to the continual danger of injury. If there were no other objections, therefore, to this canal, it is insufficient in point of size, and does not afford the facilities required for the trade at this time, and must become every year more objectionable in this respect, in consequence of the rapid increase of our trade.

To estimate fully the validity of this objection, it should be stated that these delays occur almost daily, during the busy season, and vary from a few hours to a whole day. The expenses of such a boat will be somewhere from $50 to $100 per day, and that amount or any large fraction of it, occurring only at each alternate trip, would in the course of a year form a large item, in the account of a single boat; but which multiplied by the number of boats which suffer by the delay, would give a sum total of actual loss to the commerce of the West, more than sufficient to pay for the annual repairs and custody of such a

canal. It is proper to add, that these vexatious delays, are inseparable from the nature of this work, which is constructed on a scale too limited for the purposes of its creation, or rather, whose dimensions, originally deemed sufficient, have been outgrown by the increase of the trade; and that we do not suggest them as evincing any delinquency on the part of the Company.

The insufficiency of this Canal is by no means attributable, as a matter of censure, to the Stockholders or their officers.—We speak of it only in reference to the wants of our commerce. The work was commenced under the most discouraging circumstances, and was carried forward in the face of formidable obstacles, by an exertion of great enterprise and perseverance. It is a great and useful work, and affords facilities to commerce, which in comparison with the ancient mode of transporting goods round the Falls by portage, cannot be too highly appreciated. It is proper also to state, that before the dimensions of the locks were decided upon, the largest boats then afloat on the Ohio were measured, and the locks were made, as was supposed, of sufficient capacity to pass every description of river craft. The model of our boats has, however, been since changed, and the locks are now found to be entirely too small; while the vast increase of commerce has rendered the canal itself inadequate to the great purpose of its construction.

But the third objection, is that which is complained of as most grievous, and which demands the prompt interposition of Congress. In presenting this important subject to the serious consideration of the National Legislature, and the public, we shall proceed to shew the amount of commerce which passes through this Canal—the amount of tolls received by the Company—the exorbitant profits in which the government participates as a Stockholder—and the unjust burthen imposed upon the owners of vessels navigating the Ohio river.

The following table, taken from the Reports of the Company, shews the number of vessels which passed the Canal, and the receipts of toll, from 1831 to 1843, inclusive:—

Abstract of the Boats that have passed, and Tolls received on the Louisville and Portland Canal.

	Steam Boats.	Flat & Keel Boats.	Tons.	Amount Received.
1831	406	421	76,323	$12,750 77
1832	453	179	70,109	25,756 12
1833	875	710	169,885	60,736 92
1834	938	623	162,000	61,848 17
1835	1,256	355	200,413	80,165 24
1836	1,182	260	182,220	88,343 23
1837	1,501	165	242,374	145,424 69
1838	1,058	438	201,750	121,107 16
1839	1,666	578	300,406	180,364 01
1840	1,231	392	224,841	134,904 55
1841	1,031	309	189,907	113,944 59
1842	983	183	172,755	95,005 10
1843	1,206	88	232,264	107,274 65
	13,756	4,701	2,425,567	$1,227,625 20

The original subscription of the United States, to the Louisville and Portland Canal, was $235,000, by which the Government became the owner of 2350 shares of the Stock. In June 1833, a dividend was made in stock, for the amount of profit on the tolls up to that time, and interest on the money expended up to the time of opening the canal; of which the proportion of the United States was 552 additional shares, making the whole interest of the Government 2902 shares. The remainder of the stock, 7098 shares is owned by individuals, making the whole number of shares 10,000, and the capital $1,000,000. On this stock, the United States has received in cash dividends $258,378, being $23,378 more than her original subscription and entire advance in money.

It thus appears that the Canal, in twelve years, has more than paid for itself in dividends. The objection, however, is not that individuals should reap a profit on their investment, to which they are justly entitled; but that this useful and necessary facility for passing the Falls, should, by being placed in the hands of individuals, be the means of levying a tax on the trade of the river, so heavy as to be a burthen. To shew that this tax is intolerably high, we state the following conclusive facts: A steamboat owned at Cincinnati, and plying regularly between this city

and St. Louis, is obliged to pass through this canal. The boat being of 300 tons' burthen, and worth $24,000 when new, has heretofore paid for each passage through the locks sixty cents per ton, or $180, and supposing the number of trips to be *thirty* in a year, the tolls will amount annually to $5400, which is over 22 per cent, on its cost, and in five years, the full term of life of a Western Steamboat, will have exceeded the first cost of the boat. The toll, however, has lately, and since the above statement was first made, been reduced to *fifty* cents per ton, and a boat of 300 tons will now pay but $4,500 for thirty trips, and will not expend her value in tolls in less than 5½ years.

We state another fact, the particulars of which we have received from an authentic source, and which corroborates the instance given above. A boat of 190 tons, owned at Cincinnati, has been in the habit of making her trips from this city to St. Louis and back, in two weeks, and has passed the canal *four* times in one month. Her toll, each trip, at $60 per ton, was $114, and her toll for one month was $456, or at the rate of $5,472 per year, which is nearly half the value of such a boat. It may be said, that no boat makes 48 trips, or even 30 trips between St. Louis and Cincinnati in a year, as the ice or low water would obstruct the navigation at some seasons, and at others the boat might pass over the Falls. But this is no answer to our argument, the object of which is to shew, that during the season in which we use this canal, we pay an exorbitant tax, which reduced to a yearly rate, would swallow the value of a boat in a few years.

This is a practical view of the subject, in regard to which there can be no doubt. The passage between St. Louis and Cincinnati is regularly made in from three to four days, and if three days be allowed for lading and unlading at each place, which is more than is required, the fair time for the trip, both ways, will be two weeks. This is in fact about the average time consumed; and during seasons in which the canal is used, these boats do actually pass the lock *four* times per month. The toll being now reduced to 50 cents per ton, a boat of 200 tons, whose value, at $60 per ton, is $12,000, will pay for each pas-

sage through the locks, $100, or at the rate of $400 per month, and $4,800 per year.

The navigation of the Ohio below Cincinnati, and of the Mississippi below St. Louis, is not obstructed by ice and extreme low water, more than four months in the year; the navigation is open eight months, during which time the boats between Cincinnati and St. Louis may, and actually do run, and are actively employed. The freshets which enable them to pass over the Falls, are few, and of short duration, and should not be taken into view, in any estimate made for practical purposes; the toll, if any, should be such as the owners of boats could afford to pay throughout the season, and so certain that it could be calculated in advance as a regular item in the expenditure of the boat. Now if a boat passes the canal *four* times in a month, or *thirty-two* times in *eight* months, paying 50 cents per ton for each transit, she will pay sixteen dollars per ton, in the eight months which are comprised in the running season, and in four seasons she will pay *sixty-four* dollars per ton, which is the full value.

The capital invested in steamboats in the West, we have shewn to be $7,200,000, which must be re-produced every five years, as that is the term of the existence of a boat; and if this capital be subject to a tax of from 20 to 30 per cent. in tolls, and 18 per cent. insurance, those boats which pass the canal, will, in five years, pay double their cost, in freight and insurance. In other words, a steamboat engaged in the regular trade between Cincinnati and St. Louis, which cost $25,000 when new, must earn $75,000, to pay her cost, insurance, and tolls, over and above her ordinary expenses, before she can begin to make profits for her owners. This expenditure is only reduced by the occurrence of freshets which enable the boats to pass over the Falls, or by occasional trips to other ports.

While our trade is burthened by this enormous tax, we have shewn that, for the use of an insufficient Canal, the stockholders are reaping a high annual interest upon their investment, amounting probably to an average of 12 or 13 per cent; and the government of the United States is a partner in the gains of the profitable stock, having already received for their subscription of $235,000, cash dividends amounting to $258,378

And stock amounting to 55,200

$313,578

So that the government has received back in dividends $78,578 more than her investment, and is the holder of nearly one-third of the shares, of this money making corporation.

We repeat that no liberal man would object to paying a fair interest on the investment of those public spirited individuals, who have completed this useful work, at their own risk. And however any may object, they have vested rights, which deserve respect, and around which the law has thrown her conservative sanction. The public voice, however, has condemned the levying of a tax on such a highway, and the high rate of the toll has increased the general dissatisfaction. To remedy this evil, an act has been passed by the Legislature of Kentucky, authorising the Canal Company to appropriate the net annual income of the Canal to the purchase of stock, held by others than the United States, at a rate commencing at $150 per share, and increasing annually by the addition of the interest on the value of the stock; and when the whole shall be purchased, to surrender the Canal to the United States, on condition that the work shall be kept in repair, and that the tolls levied shall be no more than sufficient to pay the expenses of the custody, repairs, &c. There is a further condition, that the United States, after taking possession of the work, shall report annually to the Legislature of Kentucky, the amount of the receipts and expenditures, and making the latter body the judge, whether the conditions of the law are complied with.

The stock of the Canal, having become a safe and profitable investment, the inducement to the acceptance of this law, is by no means strong, and it would doubtless have been rejected, had the stockholders consulted only their present interest. But the universal condemnation of a tax, which all unite in pronouncing insupportably burthensome, indicated to them in significant language, the impolicy of provoking a high spirited people, into an exercise of power, which might, by diverting the commerce into other channels, render their work of little value. They reluctantly consented to carry the act into effect; and they have reported that 471 shares were purchased from the profits of 1843, and that 500 shares will be purchased in 1844.

But will the United States await the tardy operation of this

law, and will she accept the trust offered by it? If the net receipts of a year will only purchase 500 shares, it will take *fourteen* years to buy 7,000 shares, at the same price; but as the price of the stock is to be annually increased, it will take longer. If the locks are to be enlarged, by the company, and other improvements made, which are urgently and imperatively demanded, and these expenditures deducted from the annual receipts, it will take at least *twenty* years, to complete the purchase, and bring about the desired reduction of tolls—a delay, to which the Western people are not willing to submit. And if the requsite improvements are to be delayed until the change of ownership shall be consummated, the just expectations of the Western people will be disappointed, for no unnecessary delay, not the delay of a year without unavoidable necessity, will be viewed with complacency by those who are interested in this navigation.

Neither do we suppose that the United States will accept the work, on the conditions imposed by the law of Kentucky, and hold it subject to the supervisory power of that State. The proposition is unreasonable, and will hardly be insisted upon, when its objectionable character shall be pointed out.

We respectfully advise, we earnestly solicit, that an appropriation be made without delay, for the purchase of this Canal, at a price conforming with the value which the stockholders have placed upon it by accepting the terms of the law above alluded to; and that measures be taken to procure the repeal of any law of Kentucky, by which the control of that State over the work is reserved. This purchase can be made, as will be seen from the above data, for a sum not varying far from *one million* of dollars; and by a further expenditure of from *three to four hundred thousand dollars*, in making a new set of locks, to be additional to those now in operation, in deepening the Canal, and in widening it in two or three places to admit the passage of boats, the requisite facilities for surmounting this formidable obstruction would be fully and promptly supplied. The Canal might then, either be supported by the United States and made free, or a small toll might be imposed, sufficient to pay for the repairs and requisite attendance. That toll would probably not

exceed *five cents* per ton, or *one-tenth* of the tribute which is now levied upon the industry and enterprise of the Western people.

Your Memorialists, in making this recommendation, are influenced in some measure by the consideration that this work can be purchased as cheaply as a new Canal could be constructed, of similar length, and equal efficiency, and that such being the case, good faith suggests the purchase of the property from the individuals who hold it under the sanction of a law of Kentucky, and in partnership with the government of the United States, rather than the construction of a rival work by which the value of this property would be destroyed. They believe also that they would arrive at the object of this Memorial, sooner, by the purchase and improvement of this Canal, than by the tedious process of constructing a new work. But if this purchase cannot be effected, or can only be accomplished at an unreasonable price, or subject to burthensome conditions, or vexatious delay, then we respectfully recommend the construction of a new work, upon the most eligible site, to be selected by the Engineers of the government.

It has been suggested that this improvement might be effected by excavating a channel through the Falls. The practicability of this plan, has not been demonstrated, and even if a safe passage of the Falls could be produced by cutting through the rock, we should deprecate the attempt. The natural dam formed by this ledge of rock, being removed, a series of rapids or bars in the channel above would probably be produced, which would greatly injure the navigation.

The Upper and Lower Rapids of the Upper Mississippi, present formidable obstructions to the navigation of that noble river, and impede the access to one of the most productive and beautiful regions of the habitable globe. These impediments, consisting of ledges of rock which lie across the river, are extensive, and during the seasons of low water, render this fine river wholly impassable for freighted boats, which are obliged to be unladen and lighted over the rapids; and causing the expense of freight to increase by double and three-fold, at such seasons. Yet they are of such a character as to be susceptible of removal at a

comparatively small expense. Above these rapids the river is navigable to the Falls of St. Anthony, distant from St. Louis 900 miles. In their vicinity, and beyond them, lies a wide expanse of country, embracing a large portion of Illinois, Iowa, and Wisconsin, of incomparable fertility and inexhaustible resources—a region of prairies teeming with vegetative power, and ready cleared to the hand of the husbandman. Equally adapted to the growth of wheat, the rearing of cattle, and the production of wool,—this country already, though in its infancy, affords a large surplus for exportation; and so vast is the extent of its rich lands, that the increase of its staples is great, beyond conception. The country over which thirteen years ago, the militia of Illinois chased the bands of Black-Hawk, and in which the Sauks, the Sioux, and the Winnebagoes contended for mastery, furnished during the past year the freights for 244 steamboats and 55 keels!

In the same region are lead mines, in prosperous operation, which supply annually to commerce, 40,000,000 pounds of lead, included in the above estimate, worth One Million of dollars, and supposed to be capable of supplying that metal, in sufficient quantities to meet the demands of the civilized world; while the copper mines recently opened, are also becoming valuable. To shew further the productiveness, of a country so recently a wilderness, and still only known in that character to most of the American people, we state that in 1840, nine counties in the southern part of Wisconsin, produced 197,225 bushels of wheat, 25,966 head of cattle, 45,136 hogs, and 7,564 tons of lead. If such are the products of a small and remote district of a newly settled land, how prolific must be the broad region in which it lies? How impossible to calculate the wealth of the Great West, when single counties estimate their products by such imposing figures!

It appears from data kept at St. Louis, that the navigation of the Upper Mississippi was clear of ice; in 1841, eight months, in 1842 eight months and seven days, and in 1843, seven months and eleven days. As the navigation of this vast region is closed by the immutable laws of nature during four months of the year, the duty of the government is the more imperative, to keep it

open during the other eight months, into which all the business done upon its waters must be crowded.

The arrivals of boats from the Upper Mississippi, at St. Louis, during the last three years, were as follows :—

	Steamboats.	*Keel Boats.*
1841	143	108
1842	195	88
1843	244	55

The emigration to this favored region is great; the completion of the Illinois and Michigan Canal, which may now be looked for at an early period, and the connection between the Wisconsin and Fox rivers, which cannot be long delayed, will give it peculiar attractions; and as the proprietor of by far the greater part of the domain, the government is invited by interest, as well as by duty, to open the navigable channels of the country, and thus accelerate its settlement, and promote the sale of her own lands.

But we advocate the improvement of this river, as well as the Illinois, the Wabash, and the Ohio, with the more confidence, as two of them are already connected with the Lakes by canals, and the other two will soon be similarly connected, and they are thus emphatically great national highways, connecting the North and the South, the East and the West, and bringing distant and apparently discordant interests into harmonious co-operation.

The bars in the Ohio may be classed,—first, into those formed of hard and apparently permanent gravel; 2nd, shifting or loose gravel; and 3d, shifting sandbars. These bars have been minutely surveyed, on several occasions, by officers of the United States, whose reports furnish all the information which may be desirable in regard to them, and preclude the necessity of any detailed description in this memorial. It may be remarked, however, that while these bars present serious obstacles to navigation in low water, they seem also to serve a valuable purpose in another respect. The Ohio through its whole course, has in general a gentle and equable current. In low water, the river is resolved into a series of ripples or dams, with extensive basins of slack water between them, varying in depth from two to five fathoms. It would seem as if Nature had formed these bars or dams, for the purpose of collecting the water above them, and thus form-

ing a succession of navigable pools. Following this indication, it would seem desirable, not to remove them, which is perhaps impracticable, but to pass them by some form of artificial channel, which would not greatly change the depth of the water above. Experiments having this object in view, have already been made under the patronage of the government, by constructing wing dams from each side of the river, so as to confine the current within narrow banks, and to give it a sufficient volume of water to wash a current for itself. A work of this character was constructed about eighteen years ago, by Col. Long of the Topographical Engineers, at Henderson bar, 200 miles below Louisville; and similar dams have since been constructed, at French Island, Three Mile Island, Scuffletown bar, and the Three Sisters. These were among the shoalest and most difficult places in the Ohio, and they have been greatly improved. We have little doubt that this mode of improvement, when prosecuted upon a scale consistent with the importance of the object, and the liberality of a great Nation, and reduced to system by a careful attention to the results of experiment and observation, will be found successful, to a considerable extent. It is supposed that it may prove abortive in some cases, from a tendency of the sand when washed from one place, to deposite itself in another immediately below, and thus form a new obstruction. This might occur in some, but certainly would not in all instances; and if the original obstruction can be removed by art, the new creation may also be removed by the same, or some other means. It may also be suggested, that many of these bars, supposed to be the most difficult to affect by permanent artificial improvement, are composed of shifting sand, through which channels are easily cut, which would remain open during the season of low water, but would be filled up with the same species of loose sand, during the floods of the winter. It may be worthy of experiment, whether at such places, channels might not be opened annually, and kept open during the season, at an expense, trifling when compared with the value of the service. Small vessels, propelled by steam, and supplied with machinery for scooping out the sand, would open channels sufficiently deep for the smaller class of steamboats, with great facility, and they might run from bar

to bar throughout the season of low water, without incurring any formidable expenditure.

The Ohio river, though not obnoxious to the full force of the sarcasm of the distinguished Virginian who described it as frozen one half of the year, and dried up during the remainder, is subject to vicissitudes, which seriously affect the navigation, and demand the national attention, from the double consideration of the magnitude of the evil, and the vastness of the means required for its correction. If the work can be done at all, in a manner worthy of the energies of a great people, and permanently advantageous, it must be done by the National Government.

When the waters are low during the summer and autumn, this majestic river dwindles to a small stream, and becomes comparatively useless. Among the hills of Pennsylvania and Virginia, it is seen rippling over bars of gravel and ledges of rock, through which boats of the lightest burthen, with difficulty find a passage. Further down, a series of sandbars, extending in some places from shore to shore, and in others projecting from the margin of the river far into its bed, render its navigation almost impracticable. Steamboats constructed for the purpose, and navigated by skilful pilots, ply at this season with difficulty. Many are grounded upon the bars, from which perilous situation, some are relieved by great labor, attended with serious delay and expense, while others remain exposed to the elements during the remainder of the season, and are either lost or seriously injured.—The larger boats are wholly useless during this part of the year; and of the hundreds of noble vessels that are actively plying at other seasons, freighted with rich cargoes, the greater portion are now idle.

As a general rule the water is lowest during the months of July, August and September, but the autumnal months are frequently dry, and in that case, the river remains low until the winter. We call attention to this fact, as showing the long period during which this valuable navigation is destroyed, or so impeded as to be attended with great expense and risk of loss.

Throughout the winter the frequent changes from cold to moderate weather, produce rains and thaws, which occasion a

series of freshets, and afford ample supplies of water. The change from the severe cold of the winter, to the higher temperature of the spring, is usually sudden, and causes the precipitation of vast floods into the channels of our rivers. The snows which cover the Allegheny Mountains, along their whole western exposure, from the borders of New York, to those of North Carolina, are rapidly melted, and the whole of this mass of water thrown suddenly into the Ohio, which now attains its greatest depth and volume. In the great rise of 1832, the water rose at Cincinnati sixty-three feet above low water mark; the sectional area was 91,464 feet, without including its extension over the lower parts of Cincinnati and Covington; the number of cubic feet discharged per hour was 2,998,529,714, and the velocity of the stream was 6½ miles per hour.

One of the important consequences of these great floods is, the creation of obstructions in the form of logs and trees, which are swept from the bank and precipitated into the stream. The snags which cause the destruction of so many boats, are formed of large trees which are thrown into the channel, by the crumbling of the banks, or the force of the current. The base of the stem, and the mass of roots, rendered heavier by the earth which adheres to it, sinks to the bottom; the top of the tree floats, and is thrown into the direction of the current; the roots become imbedded and firmly fixed; the smaller branches decay and drop off, and the large limbs remain, pointing down the stream. When these sunken trees are concealed beneath the surface, they are very dangerous to boats, which, rushing upon them with the momentum given by a powerful steam engine, seldom fail, when they strke, to have the hull perforated, and the boat sunk.

This branch of the subject has already received the attention of the government, and the results of the experiments instituted have been entirely satisfactory. The snag-boat, constructed under the direction of the government, has been successful in removing these obstacles, at a very trifling expense, and with great facility. The boat is of simple construction, yet has such power, that the largest tree, however firmly fixed, is removed in

a few minutes. A number of these ingenious vessels were employed for several years, with such success, that thousands of snags were removed from the Ohio and Mississippi, the most dangerous places were rendered perfectly safe, and the whole navigation made completely free from this formidable evil. In the year ending in September 1833, 1960 snags were taken up from the Mississippi, and the chances of danger diminished by at least that number. The crews of the boats were employed within the same year, when the water was too high to permit their working on the bed of the river, in felling the overhanging trees, which stood on banks liable to be undermined; and removed 10,000 trees, which must soon have been precipitated into the current.

From 1822 to 1827, the loss of property on the Ohio and Mississippi, by snags alone, including steam and flat boats, and their cargoes, amountedto $1,362,500. The losses on the same items, from 1827 to 1832, were reduced to $381,000, in consequence of the beneficial action of the snag boats, and those losses were still further reduced in the years immediately succeeding by the diligent prosecution of the same service.

We are not aware of the causes which have induced the discontinuance of this valuable service, but we know that the consequences have been most disastrous. For several years past, the appropriations for the snag boats, have been so small as to render that service wholly inefficient, and the snags have accumulated with fearful rapidity in all the western rivers, while the increasing amount of commerce, and number of boats, have swelled the danger and the losses to an appalling extent. In the memorial of the citizens of St. Louis, recently published, it is stated that "in the year 1839 there were forty steamboats lost; forty-one in 1840; twenty-nine in 1841; and in the year 1842, the number is said to be twenty-eight—making a total in four years of one hundred and thirty-eight boats." The estimate here given for the latter year, is far short of the truth, for since the date of this memorial, at least fifteen steamboats have been lost; indeed, while preparing this memorial, a single mail from the southwest, brought intelligence of the loss of five boats,

four more were added to the melancholy list, on the following day, and three more by a subsequent arrival.

Between the 11th of September and the 15th of October, in the year 1842, the losses on the Mississippi, between St. Louis and the mouth of the Ohio, a distance of only 180 miles, were $234,000. Within the succeeding seventeen months, there have been lost 72 steamboats, worth $1,200,000, besides their cargoes, which were of great value.

The losses paid by the Insurance Offices in Cincinnati alone, on boats and cargoes, during a period of five years, from November 1837 to November 1842, including only the losses by obstructions in the navigation, and excluding all losses by explosion, collision, fire, and other causes, have been $442,930 89. As Insurance is made also at Pittsburgh, Louisville, Nashville, St. Louis, Wheeling, Natchez, New Orleans, and at some of the smaller towns, the above sum might be multiplied by seven to arrive at something like a fair approximation of the losses sustained by underwriters, from the dangerous condition of the navigation, and the result would be three millions of dollars, or six hundred thousand dollars per annum. If to this be added the losses from the same cause, on which there was no Insurance, the amount would be not less than one million of dollars per annum. One million of dollars per annum is actually taxed on the commerce of the West, for losses sustained, in consequence of obstructions, which might be wholly removed, by an appropriation by Congress, of a comparatively trifling sum! An additional fact shewing the danger of this navigation, is, that many offices have declined to insure the hulls of boats, and such risks are only taken on the best boats, and at rates varying from 12 to 18 per cent; the insurers are said to lose money at even these enormous rates. The amount then, of the annual risk, on the $7,200,000 invested in steamboats alone, is more than one million of dollars.

The most fruitful causes of these losses are the snags; a species of obstruction which we have shown to be completely within the control of the government; and we therefore respectfully urge the propriety of an immediate and energetic action by the government, in reference to this subject, by the

construction of as many snag boats as may be necessary, and an annual appropriation, for keeping these boats in the regular service of the Nation, from year to year.

We have thus far not touched upon the exposure of life, occasioned by the inattention of government to this dangerous navigation. There are employed on the 60 steamboats, and the 4000 flat and keel boats, that float on the Ohio and Mississippi, not less than from 45 to 50,000 persons; and as all the steamboats carry passengers, there are several hundred thousand, not Western citizens only, but citizens of each and every State in the Union, annually exposed to delay, expense, inconvenience, and jeopardy of life, from the causes indicated in this Memorial. And who shall count the value of their lives? Shall the lives of the free citizens of an enlightened Nation, be weighed against the amount of an appropriation in money, which would insure their safety? The Romans paid the highest civic honors to him who saved the life of a citizen; and if we admire the principle which dictated this policy, what should be the conduct of a christian and highly civilized Nation—a Nation of unbounded resources and untiring energy, in reference to a work of comparative insignificance, but the neglect of which involves daily and hourly the lives of many citizens? The American people have reserved in their Constitution the right of passing from State to State, and of transporting their property throughout the Union; and can it be doubted that the government should facilitate the exercise of a right asserted with such provident care? To an enterprising, commercial, and highly social people, who travel so continually and so extensively, no subject can be more important than that under consideration.

It might not be proper here to enter into a minute description of a steamboat disaster on the Mississippi. The peculiar character of that mighty river, the irresistible force of the current, and the steep and crumbling nature of the banks which afford but few safe places of landing, surround the disabling of a boat on these waters with fearful dangers. When a steamboat heavily laden, and crowded with passengers, strikes

upon a snag in the night, and is engulphed in a few minutes in the stream, the scene is terrific beyond description; the loss of life to some of the more helpless of those embarked, is inevitable, and the danger to all appalling.

It is not be disguised that many losses occur from the insufficiency of steamboats and their machinery, and from the culpable rashness, negligence, and ignorance of those who have them in charge. This a subject which has excited much public attention, and has even occupied a prominent place in the discussions of the National Legislature. The result of the most careful inquiries has produced a general conviction on the minds of those conversant with the subject, that while we have many fine boats, managed with as much skill and prudence as those of any other country, and in which the passenger enjoys the highest degree of safety of which such navigation is susceptible, there is connected with the remainder, an inexcusable want of care of the lives intrusted to them. The unavoidable accidents to steamboats, are few, in comparison with losses occasioned by neglect and bad management, and by obstructions in the navigation.

To discriminate among these causes of loss, and apply the remedy, is a matter of no small delicacy and embarrassment, but it is one which would be stripped of much of its difficulty if the natural obstacles which endanger the navigation were removed. At present, the great number of steamboat losses, blunts the public sensibility in regard to such catastrophes, and wearies and baffles that spirit of inquiry which would investigate the causes of these disasters; while it affords a ready excuse for those, who might otherwise become the objects of public condemnation. If the river channels were disarmed of their terrors, and the safety of boats was made to depend entirely upon the fidelity and skill of their construction and management, the public would demand a much greater degree of security than is now expected, and the owners and officers of boats would be held to a higher degree of responsibility. A wholesome moral effect would also be produced by the action of the Government. So long as the government, regardless of its parental and conservative character, remains a cold and indifferent spectator of the

destruction of life and property, so long will life and property cease to be regarded with care by the thoughtless portion of its citizens. In a country where public opinion is the sovereign law, and where so much of that public opinion flows from the legislation created by itself, a tender sensibility for the life of the citizen, and a decorous respect for his property, is peculiarly demanded from those, who in making the laws, influence the morals and sentiments of the people.

In conclusion, we commend this whole subject to the early and serious attention of Congress, and pray the adoption of such measures as are demanded by the urgency of the occasion, the vast exposure of life and property, the greatness of the interests involved, the honor and advantage of the American people.

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